



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

Approved by AICTE, Affiliated by JNTUH, Accredited by NAAC- 'A' Grade

Medbowli, Meerpet, Balapur, Hyderabad, Telangana- 500097

Mob: 9393959597. Email: info@tkrec.ac.in, deanacademics@tkrec.ac.in



Department of Information Technology

I B.Tech I Semester Course Outcomes

Course Name: Mathematics – I

Course Code: C101		Academic Year: 2019-20
CO1	Write the matrix form of a set of linear equations and to analyse the solution of the system of equations.	
CO2	Reduce the Quadratic form to Canonical form.	
CO3	Describe the nature of sequence and series.	
CO4	Apply the mean value theorems.	
CO5	Calculate the extreme values of functions of two variables with / without constraints.	

Course Name: Engineering Chemistry

Course Code: C102		Academic Year: 2019-20
CO1	Gain the knowledge of atomic, molecular and electronic changes at different level and its effect on conductivity	
CO2	Assess the quality of water for industrial and domestic application	
CO3	Extrapolate the knowledge of corrosion and electrochemical cells	
CO4	Identify the reaction mechanisms in the synthesis of different molecules in different conditions	
CO5	Gain the basic required skills to get clear concepts on spectroscopy and application to medical and other fields	

Course Name: Basic Electrical Engineering

Course Code: C103		Academic Year: 2019-20
CO1	Verify the basic Electrical circuits through different experiments.	
CO2	Evaluate the performance calculations of Electrical Machines and Transformers through various testing methods.	
CO3	Analyse the transient responses of R, L and C circuits for different input conditions.	
CO4	To determine the performance of different types of DC, AC machines and Transformers.	
CO5	To measure the electrical parameters for different types of DC and AC circuits using conventional and theorems approach.	

Course Name: Engineering Workshop

Course Code: C104		Academic Year: 2019-20
CO1	Demonstrate various machines, tools and their operations.	
CO2	Apply different workshop trades like fitting, carpentry, foundry and welding.	
CO3	Practice workshop trades like Tim smithy, Black smithy.	
CO4	Identify suitable tools for different trades of engineering processes including drilling, material removing, measuring, chiselling.	
CO5	Apply basic electrical engineering knowledge for house wiring practice.	

Course Name: English

Course Code: C105		Academic Year: 2019-20
CO1	Use English Language effectively in spoken and written communication.	
CO2	Comprehend the given texts and respond appropriately.	
CO3	Communicate confidently in various contexts and different cultures.	
CO4	Demonstrate basic proficiency in English including reading and listening comprehension, writing and speaking skills.	
CO5	Improve language proficiency to meet their academic and professional needs.	

Course Name: Engineering Chemistry Lab

Course Code: C106		Academic Year: 2019-20
CO1	Develop experimental skills to design new experiments in engineering	
CO2	Determination of parameters like hardness and chloride content in water	
CO3	Estimation of rate constant of a reaction from concentration – time relationships.	
CO4	Determination of physical properties like adsorption and viscosity	
CO5	Calculation of R _f values of some organic molecules by TLC technique	

Course Name: English Language and Communication Skills Lab

Course Code: C107		Academic Year: 2019-20
CO1	Employ the nuances of English language through audio-visual experience and group activities.	
CO2	Articulate a neutral accent of English for intelligibility by overcoming mother tongue influence.	
CO3	Develop the skill of using appropriate language in various speaking contexts.	
CO4	Take part in oral presentations using formal language.	
CO5	Improve speaking skills with clarity and confidence which in turn enhance their interpersonal skills.	

Course Name: Basic Electrical Engineering Lab

Course Code: C108		Academic Year: 2019-20
CO1	Verify the basic Electrical circuits through different experiments.	
CO2	Evaluate the performance calculations of Electrical Machines and Transformers through various testing methods.	
CO3	Analyse the transient responses of R, L and C circuits for different input conditions.	
CO4	To determine the performance of different types of DC, AC machines and Transformers.	
CO5	To measure the electrical parameters for different types of DC and AC circuits using conventional and theorems approach.	

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I B.Tech II Semester Course Outcomes

Course Name: Mathematics – II

Course Code: C109		Academic Year: 2019-20
CO1	Determine different types of ordinary differential equations of first order.	
CO2	Apply the concept of differential equation to real world problems.	
CO3	Apply the concept of multiple integrals to find areas, volumes.	
CO4	Evaluate the centre of mass and gravity for cubes, sphere and rectangular parallelepiped.	
CO5	Calculate the line, surface and volume integrals and converting them from one to another.	

Course Name: Applied Physics

Course Code: C110		Academic Year: 2019-20
CO1	The student would be able to learn the fundamental concepts on Quantum behaviour of matter in its micro state	
CO2	The knowledge of fundamentals of Semiconductor physics, Optoelectronics, Lasers and fibre-optics enable the students to apply to various systems like communications, solar cell, photocells and so no	
CO3	Design, characterization and study of properties of material help the students to prepare new materials for various engineering applications.	
CO4	The course also helps the students to be exposed to the phenomena of electromagnetism and also to have exposure on magnetic materials and dielectric materials.	
CO5	The course helps the students to face problems and calculations in multidisciplinary areas.	

Course Name: Programming for Problem Solving

Course Code: C111		Academic Year: 2019-20
CO1	Build the algorithm for the given unsolved problems	
CO2	Apply the concepts of Arrays, Pointers, Strings and structures to find the solution for given problem	
CO3	Apply the various pre-processor commands in a given different real time situations	
CO4	Dissect a problem into sub functions to develop modular reusable code	
CO5	Demonstrate various searching and sorting techniques along with the complexity analysis	

Course Name: Engineering Graphics

Course Code: C112		Academic Year: 2019-20
CO1	Apply the principles of Engineering Graphics to create Engineering Drawings of various geometric constructions, conic sections, curves and scales as per BIS standards.	
CO2	Construct orthographic projections for points, lines and planes in different quadrants and Auxiliary views.	
CO3	Draw the sectional views and true shape of sections of solids, by applying principles of projections.	
CO4	Draw the development of surfaces and intersections of solids in real time situations.	
CO5	Develop isometric and orthographic views of the objects.	

Course Name: Applied Physics Lab

Course Code: C113		Academic Year: 2019-20
CO1	Able to study the(V-I/P-I) characteristics of LED, LASER and Solar cell.	
CO2	Able to understand the energy gap of semiconductor diode.	
CO3	Correlate the theory of Hall effect with experiment by determining the Hall coefficient.	
CO4	Examine the Bending losses for different Optical fibre cables.	
CO5	Able to understand various concepts-Resonance, Time constant and Magnetic field using LCR, RC, Stewart and Gees circuits.	

Course Name: Programming for Problem Solving Lab

Course Code: C114		Academic Year: 2019-20
CO1	Formulate The Algorithms for Simple Problems	
CO2	Translate the given algorithms to C program.	
CO3	Correct the logical errors found during program execution	
CO4	Make use of pointers in different types to modularize the code with functions.	
CO5	Apply the appropriate sorting techniques for the given list of elements.	

Course Name: Environmental Studies

Course Code: C115		Academic Year: 2019-20
CO1	The students able to know basic concept of ecological perspective and the value of the environment.	
CO2	The students able to understand the significance of various natural resources and its management.	
CO3	The students able to demonstrate a comprehensive understanding of the world's biodiversity and the importance of its conservation	
CO4	The students able to identify different types of pollution and their control measures, discover effective methods of waste management and come out with best possible solutions.	
CO5	The students able to raise awareness about environmental laws and sustainable development.	

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II B.Tech I Semester Course Outcomes

Course Name: Analog and Digital Electronics

Course Code: C201		Academic Year: 2020-21
CO1	The Understand the characteristics and utilization of various components.	
CO2	Design and analyze small signal amplifier circuits.	
CO3	Understand and analyze operation logic gates and realize logic gates with logic families	
CO4	Design and analyze operation of combinational and sequential circuits	
CO5	Design flip-flops, shift registers and counters	

Course Name: Data Structures

Course Code: C202		Academic Year: 2020-21
CO1	Construct appropriate data structures to represent data items in real world problems with linear data structures.	
CO2	Ability to apply dictionaries and hash tables to overcome problems of sequential data structures.	
CO3	Ability to design programs using a variety of non linear data structures binary trees and graphs	
CO4	Able to measure the computational efficiency of the principal algorithms for sorting, searching	
CO5	Able to Implement the application of algorithms for pattern matching	

Course Name: Computer Oriented Statistical Methods

Course Code: C203		Academic Year: 2020-21
CO1	Apply the concepts of probability and distributions to some case studies	
CO2	Able to find out the Mean and Variance of the random variables.	
CO3	Able to discuss the importance of the normal distribution in statistics	
CO4	Able to understand the point and interval estimation And able to understand problem of testing of hypothesis	
CO5	Apply the theory of stochastic processes to analyze linear systems	

Course Name: Computer Organization and Microprocessor

Course Code: C204		Academic Year: 2020-21
CO1	Able to understand the basic components and the design of CPU, ALU and Control Unit.	
CO2	Ability to understand memory hierarchy and its impact on computer cost/performance.	
CO3	Ability to understand the advantage of instruction level parallelism and pipelining for high performance Processor design.	
CO4	Ability to understand the instruction set, instruction formats and addressing modes of 8086.	
CO5	Ability to write assembly language programs to solve problems.	

Course Name: Object Oriented Programming using C++

Course Code: C205		Academic Year: 2020-21
CO1	Identify the object-oriented programming approach with respect to C++.	
CO2	Apply the concepts of classes for data abstraction for the given set of programs.	
CO3	Build the learned knowledge of polymorphism for the given set of problems	
CO4	Construct the programs by using Input/output streams.	
CO5	Demonstrate the exceptions handling process in object oriented programming	

Course Name: Analog and Digital Electronics Lab

Course Code: C206		Academic Year: 2020-21
CO1	Analyze the behaviour of diodes and transistors.	
CO2	Apply the uses of diodes and BJT in real time.	
CO3	Evaluate the characteristics of FET.	
CO4	Evaluate different combinational circuits	
CO5	Design some sequential circuits like counters	

Course Name: Data Structures Lab

Course Code: C207		Academic Year: 2020-21
CO1	Implement various operations on linear and non-linear data structure	
CO2	Analyze and implement different searching and sorting technique	
CO3	Identify the appropriate data structure to solve a given problem	
CO4	construct a program using non-linear data structures and their applications such as trees and graphs	

Course Name: IT Workshop and Microprocessor Lab

Course Code: C208		Academic Year: 2020-21
CO1	Gain the knowledge of computer hardware.	
CO2	Install the system software in the specified hardware.	
CO3	Able to build the computer by assemble different parts and make sure of troubleshoots.	
CO4	Make use of Web browsers, email and news groups.Craft professional word documents; excel spread sheet and power point presentations.	

Course Name: C++ Programming Lab

Course Code: C209		Academic Year: 2020-21
CO1	Develop programming solutions for a range of problems using object-oriented programming techniques	
CO2	Apply the concepts of classes for data abstraction for the given set of programs	
CO3	Build the learned knowledge of polymorphism for the given set of problems.	
CO4	Make use of the learned knowledge of Inheritance and Input/Output streams for the given set of problems.	

Course Name: Gender Sensitization Lab

Course Code: C210		Academic Year: 2019-20
CO1	Understanding of important issues related to gender in contemporary India	
CO2	Discussion of materials derived from research, facts, everyday life, literature and film.	
CO3	Developing a sense of appreciation of women in all walks of life.	
CO4	Attaining a finer grasp of how gender discrimination works in our society and how to counter it.	
CO5	Acquiring insight into the generated division of labor and its relation to politics and economics.	

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II B.Tech II Semester Course Outcomes

Course Name: Discrete Mathematics

Course Code: C211		Academic Year: 2020-21
CO1	Ability to understand and construct precise mathematical proofs	
CO2	Ability to use logic and set theory to formulate precise statements	
CO3	Ability to analyze and solve counting problems on finite and discrete structures	
CO4	Ability to describe and manipulate sequences	
CO5	Ability to apply graph theory in solving computing problems	

Course Name: Business Economics and Financial Analysis

Course Code: C212		Academic Year: 2020-21
CO1	Understand and Learn the Business Economic Concepts in Micro and Macro Business firm	
CO2	Understand microeconomic factors in related to demand and supply analysis and its forecasting	
CO3	Apply the theory of production function and Cost concepts to determine the Break Even Analysis. Remember different market structures, pricing strategies and different forms business organization	
CO4	Determine the financial statement by using Fundamental accounting concepts	
CO5	Interpret the financial statement by using Fundamental accounting concepts and Ratio analysis	

Course Name: Operating Systems

Course Code: C213		Academic Year: 2020-21
CO1	Categorize the components of a operating system and types.	
CO2	Identify appropriate scheduling algorithm for process management.	
CO3	Solve the situations occurred by deadlock to maintain appropriate process synchronization.	
CO4	Make use of page replacement algorithm for effective memory management.	
CO5	Apply the various system calls to enable the operating system services.	

Course Name: Database Management Systems

Course Code: C214		Academic Year: 2020-21
CO1	Construct the E-R model to represent databases on real world problems.	
CO2	Experiment with queries and nested queries on real world problems by using several operators like join, set, and aggregate.	
CO3	Plan and Relate the concept of data planning and database design using normalization.	
CO4	Utilize the ACID properties in transaction management and interpret concurrency control mechanisms.	
CO5	Categorize various file organizations and indexing for faster retrieval of data, persistent storage of data.	

Course Name: Java Programming

Course Code: C215		Academic Year: 2020-21
CO1	Define OOPs concepts & basics of java programming	
CO2	Identify the use of classes, interface, packages in solving specific problems	
CO3	Analyze the use of Single threading and multithreading programs using synchronization and handle the exceptions to increase the performance of program. and I/o classes.	
CO4	know the importance of collection framework in developing effective programs. synchronization.	
CO5	Develop GUI based applications using swings and applets	

Course Name: Operating Systems Lab

Course Code: C216		Academic Year: 2020-21
CO1	Develop CPU scheduling algorithms for processes.	
CO2	Implement c applications using UNIX system calls	
CO3	Design c applications for deadlocks	
CO4	Apply the concept of memory management for implementing a program	
CO5	Implement C programs using UNIX system calls	

Course Name: Database Management Systems Lab

Course Code: C217		Academic Year: 2020-21
CO1	Design a database schema for given problem data.	
CO2	Build a GUI application.	
CO3	Apply the normalization techniques for development of application software to realistic problems.	
CO4	Formulate queries using SQL DML/DDDL/DCL commands.	
CO5	Implement triggers to raise as per real time data and also Implement concurrency control mechanisms.	

Course Name: Java Programming Lab

Course Code: C218		Academic Year: 2020-21
CO1	Apply OOP in problem solving and develop basic programs.	
CO2	Develop basic programs on multithreading and exception handling	
CO3	Implement code for accessing the information from files	
CO4	Implement code for data structures and sorting techniques	
CO5	Develop GUI based applications using swings and applets	

Course Name: Constitution of India

Course Code: C219		Academic Year: 2020-21
CO1	Understand the concept of Indian Constitution	
CO2	Outline the Fundamental Rights and Fundamental Duties	
CO3	Analyze the Directive Principles of State policy	
CO4	Analyze the distribution of powers between of Union and states	
CO5	Ability to know the Emergency Provision of Indian Constitution	

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III B.Tech I Semester Course Outcomes

Course Name: Formal Languages and Automata Theory

Course Code: C301		Academic Year: 2021-22
CO1	Able to understand the concept of abstract machines and their power to recognize the languages.	
CO2	Able to employ finite state machines for modelling and solving computing problems.	
CO3	Able to design context free grammars for formal languages.	
CO4	Able to distinguish between decidability and undecidability.	
CO5	Able to gain proficiency with mathematical tools and formal methods.	

Course Name: Software Engineering

Course Code: C302		Academic Year: 2021-22
CO1	Understand the basic software engineering methods and practices, and their appropriate application.	
CO2	Describe data models, object models, context models and behavioural models.management.	
CO3	Describe object oriented design process and design evolution.	
CO4	Utilization of various testing problems and to develop a simple testing report.	
CO5	Students can apply the knowledge, techniques, and skills in the development of a software product.	

Course Name: Data Communications and Computer Networks

Course Code: C304		Academic Year: 2021-22
CO1	Understand the concepts of Network Topologies and network reference models (OSI and TCP/IP reference models).	
CO2	Illustrate Physical layer Guided Transmission media and Multiplexing concepts.	
CO3	Interpret Data link layer Framing Techniques, Error control Techniques using CRC error detection mechanism, flow control mechanisms using Elementary Data Link layer protocols, sliding window protocols Algorithms in a network.	
CO4	Understand the Media (channel) Access control problem in a network using multiple access protocols–ALOHA, CSMA protocols.	
CO5	Make use of the Network Layer routing algorithms to determine the best route (path) in a network communication.	

Course Name: Web Programming

Course Code: C304		Academic Year: 2021-22
CO1	Apply the techniques of Java script in client side scripting.	
CO2	Make use of OOPS concepts for problem solving.	
CO3	Create databases connectivity using JDBC.	
CO4	Make use of Servlets and JSP to create interactive web pages in client-server architecture.	
CO5	Apply the concepts of XML for structurizing the web pages	

Course Name: Principles of Programming Languages

Course Code: C305		Academic Year: 2021-22
CO1	Compare different programming languages	
CO2	Apply an importance and evolution of programming language.	
CO3	To know the central formalisms used in the description of programming languages.	
CO4	Analyze the principles of an imperative, functional, object oriented or logic oriented programming language	
CO5	Increase the ability to learn new programming languages and choose among alternative ways to express things.	

Course Name: Advanced Operating Systems

Course Code: C306		Academic Year: 2021-22
CO1	Identify Advanced Operating System Techniques	
CO2	Analyze the flaws in the design of distributed mutual exclusion algorithms.	
CO3	Explore the methods for dispersing deadlocks in detail.	
CO4	Create a distributed file system for a multiprocessor operating system.	
CO5	Formulate the solutions to schedule the real time applications.	

Course Name: Software Engineering Lab

Course Code: C307		Academic Year: 2021-22
CO1	Ability to translate end-user requirements into system and software requirements	
CO2	Ability to generate a high-level design of the system from the software requirements	
CO3	Ability to handle the experience and/or awareness of testing problems and will be able to develop a simple testing report	
CO4	Understand the importance of performance testing.	

Course Name: Computer Networks and Web Programming Lab

Course Code: C308		Academic Year: 2021-22
CO1	Implement data link layer framing methods	
CO2	Analyze error detection and error correction codes	
CO3	Implement and analyze routing and congestion issues in network design.	
CO4	Ability to develop Static web pages	
CO5	Ability to develop different types of applications	

Course Name: Advanced Communication Skills Lab

Course Code: C309		Academic Year: 2021-22
CO1	Develop LSRW skills and soft skills.	
CO2	Demonstrate the nuances of language through group activities and oral presentations.	
CO3	Build written communication skills to meet the needs of their academic and career endeavours.	
CO4	Take part in interviews with confidence thereby enhancing their employability skills.	
CO5	Choose appropriate language in their social and professional communication.	

Course Name: Intellectual Property Rights

Course Code: C310		Academic Year: 2021-22
CO1	The course is designed to provide comprehensive knowledge to the students regarding Indian position of the Patent Law and importance of IPR	
CO2	Trademarks and designs with respect to products prevents entry into the market and ensures that consumers can rely on the quality and safety of genuine products	
CO3	To help the students to learn and understand the reason for pursuing the course and helps to identify what he will be able to do at the end of the course.	
CO4	Trade secrets are secret practices and processes that give a company a competitive advantage over its competitors.	
CO5	The primary function of intellectual property rights (IPRs) is to protect and stimulate the development and distribution of new products and the provision of new services based on the creation and exploitation of inventions, trademarks, designs, creative content or other intangible assets.	

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III B.Tech II Semester Course Outcomes

Course Name: Introduction to Embedded Systems

Course Code: C311		Academic Year: 2021-22
CO1	Compute the differences between the general computing system and the embedded system.	
CO2	Choose the core and firm ware of the embedded system.	
CO3	Analysis the programming environment and IDE's used to develop embedded system languages.	
CO4	Categorize real time embedded systems using the concepts of RTOS.	
CO5	Evaluate embedded hardware and firmware.	

Course Name: Principles of Compiler Construction

Course Code: C312		Academic Year: 2021-22
CO1	Ability to Understand the various phases of compiler and design the lexical analyzer.	
CO2	Able to use lex and yacc tools for developing a scanner and a parser.	
CO3	Able to design and implement LL and LR parsers.	
CO4	Able to design algorithms to perform code optimization in order to improve the performance of a program in terms of space and time complexity.	
CO5	Ability to design algorithms to generate machine code	

Course Name: Algorithm Design and Analysis

Course Code: C313		Academic Year: 2021-22
CO1	Make use of divide and conquer methods for developing algorithms.	
CO2	Apply the concept of backtracking to solve the optimization problems.	
CO3	Solve the optimization problems using dynamic programming methodology.	
CO4	Solve the optimization problem by using Greedy method.	
CO5	Solve the optimization problem by using branch and bound method and NP-Hard and NP-Complete for the given example problems.	

Course Name: Internet of Things

Course Code: C314		Academic Year: 2021-22
CO1	Classify different protocols, models and API's of communication in IoT	
CO2	Organize the data using IoT System Management with NETCONF and YANG	
CO3	Make use of python programming and python libraries for IoT	
CO4	Apply the knowledge to sense the real world entities using different sensors by attaching to Raspberry PI	
CO5	Develop Python web application framework and REST ful web API using python Django	

Course Name: Scripting Languages

Course Code: C315		Academic Year: 2021-22
CO1	Extract the differences between typical Scripting Languages and application Programming Languages	
CO2	Describe the knowledge of Ruby objects	
CO3	Acquire programming skills in Perl language	
CO4	Apply the knowledge of creating applications using advanced Perl concepts	
CO5	Demonstrate the applications of TCL	

Course Name: Fundamentals of Internet of Things

Course Code: C316		Academic Year: 2021-22
CO1	Interpret the impact and challenges posed by IoT networks leading to new architectural models.	
CO2	Illustrate the smart objects and the technologies to connect them to network.	
CO3	Compare different Application protocols for IoT.	
CO4	Infer the role of Data Analytics and Security in IoT.	
CO5	Identify sensor technologies for sensing real world entities and understand the role of IoT in various domains of Industry.	

Course Name: Embedded Systems and Internet of Things Lab

Course Code: C317		Academic Year: 2021-22
CO1	Compute the differences between the general computing system and the embedded system.	
CO2	Choose the core and firm ware of the embedded system.	
CO3	Analysis the programming environment and IDE's used to develop embedded system languages.	
CO4	Categorize real time embedded systems using the concepts of RTOS.	
CO5	Evaluate embedded system in RTOS	

Course Name: Compiler Construction Lab

Course Code: C318		Academic Year: 2021-22
CO1	Understand the system software such as assemblers and microprocessors.	
CO2	Understand the system softwares such as assemblers and loaders.	
CO3	Develop top down and bottom up parsers.	
CO4	Understand the usage of lex and yacc tools.	
CO5	Understand SDD, SDT, intermediate code generation and machine code generation.	

Course Name: Scripting Languages Lab

Course Code: C319		Academic Year: 2021-22
CO1	Describe the knowledge of Ruby objects.	
CO2	Understand the Experiments of Transaction Control Language	
CO3	Acquire programming skills in Perl language.	
CO4	Apply the Knowledge of programming using advanced perl concepts.	

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IV B.Tech I Semester Course Outcomes

Course Name: Information Security

Course Code: C401		Academic Year: 2022-23
CO1	Demonstrate the knowledge of cryptography, network security concepts and applications.	
CO2	Ability to apply security principles in system design.	
CO3	Understand key management issues and algorithms	
CO4	Understand security issues in Wireless LAN and web	
CO5	Understand cyber security and need of cyber Laws.	

Course Name: Data Mining

Course Code: C402		Academic Year: 2022-23
CO1	Ability to understand the types of the data to be mined and present a general classification of tasks and primitives to integrate a data mining system.	
CO2	Apply pre-processing methods for any given raw data.	
CO3	Extract interesting patterns from large amounts of data.	
CO4	Discover the role played by data mining in various fields.	
CO5	Choose and employ suitable data mining algorithms to build analytical applications	

Course Name: Cloud Computing

Course Code: C403		Academic Year: 2022-23
CO1	Understand the concepts of computing paradigm.	
CO2	Make use of the virtualization and cloud computing concepts.	
CO3	Examine the cloud computing architecture layer management.	
CO4	Compare the various service delivery models.	
CO5	Determine the various cloud service providers.	

Course Name: Distributed Databases

Course Code: C404		Academic Year: 2022-23
CO1	summarize the theoretical and practical aspects of distributed database systems	
CO2	Illustrate various aspects of query processing, query decomposition and distributed query optimization	
CO3	identify the different types of transactions and the distributed concurrency control mechanisms for efficient data transactions	
CO4	Interpret the concepts of Distributed DBMS and Parallel Database Systems	
CO5	Determine the various design aspects of an object-oriented database system	

Course Name: Principles of Entrepreneurship

Course Code: C405		Academic Year: 2022-23
CO1	Understand the concepts of entrepreneurship.	
CO2	Make use of the financing and managing the new venture concepts.	
CO3	Examine the Industrial Financial Support	
CO4	Compare the various Production and marketing functions	
CO5	Determine the various acts and their applications	

Course Name: Information Security Lab

Course Code: C406		Academic Year: 2022-23
CO1	Student will be able to develop a java interface for Encryption and decryption algorithms. encryption and decryption algorithms i.e., AES, MD5 and RSA algorithms	
CO2	Student will be able to Understand the concepts of public key encryption theory	
CO3	Student will be able to Understand various applications of cryptography and security issues practically.	
CO4	Student will be able to Explore the knowledge of key exchange protocols.	

Course Name: Industry Oriented Mini Project / Summer Internship

Course Code: C407		Academic Year: 2022-23
CO1	Analyze the problem formulation and solution of the selected project.	
CO2	Develop solutions for problems using modern tools for sustainable development.	
CO3	Demonstrate ethical and professional sustainability while working in a team and communicate effectively for the benefit of the society.	
CO4	Understand the engineering, finance and management principles.	
CO5	Develop a software application or solution to complex engineering problem using modern tools	

Course Name: Seminar

Course Code: C408		Academic Year: 2022-23
CO1	Identify recent technical topics from interested domains.	
CO2	Analyze the applicability of modern software tools and technology.	
CO3	Develop Presentation and Communication skills.	
CO4	Develop Technical report preparation skills.	

Course Name: Project Stage - I

Course Code: C409		Academic Year: 2022-23
CO1	Analyze the problem formulation and solution of the selected project.	
CO2	Develop solutions for problems using modern tools for sustainable development.	
CO3	Demonstrate ethical and professional sustainability while working in a team and communicate effectively for the benefit of the society.	
CO4	Understand the engineering, finance and management principles.	
CO5	Develop a software application or solution to complex engineering problem using modern tools	

Coordinator

IQAC Coordinator

HOD



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

Approved by AICTE, Affiliated by JNTUH, Accredited by NAAC- 'A' Grade

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Department of Information Technology

IV B.Tech II Semester Course Outcomes

Course Name: Organizational Behaviour

Course Code: C410		Academic Year: 2022-23
CO1	Apply the key factors to estimate the behavior of individuals and groups in organizations.	
CO2	Assess the potential effects of organizational level factors (such as structure, culture and change) on organizational behavior.	
CO3	Analyze organizational behavioral issues in the context of organizational behavior theories, models and concepts.	
CO4	Evaluate the different aspects related to Decision Making and Controlling Process	
CO5	Describe the different theories related to Individual behavior in the Organization.	

Course Name: Human Computer Interaction

Course Code: C411		Academic Year: 2022-23
CO1	To apply HCI and principles to interaction design.	
CO2	Illustrate the disabled by designing non-traditional ways of interacting	
CO3	Apply the cognitive psychology in the design of devices for interaction	
CO4	Apply conventional and non-traditional user interface Paradigms	
CO5	Describe how testing is applied in computer interaction	

Course Name: Total Quality Management

Course Code: C412		Academic Year: 2022-23
CO1	To realise the significance of the quality of product and quality of service	
CO2	By applying several tools and techniques to improve total quality to accelerate the business	
CO3	The total cost as all investment in the prevention of defects and assure zero defect to meet customer needs	
CO4	To understand different techniques to reduce the cost to increase the profits by maintaining systematic accounts	
CO5	It is to standardise the quality to compete in international levels.	

Course Name: Project Stage - II

Course Code: C413		Academic Year: 2022-23
CO1	Analyze the problem formulation and solution of the selected project.	
CO2	Develop solutions for problems using modern tools for sustainable development.	
CO3	Demonstrate ethical and professional sustainability while working in a team and communicate effectively for the benefit of the society.	
CO4	Understand the engineering, finance and management principles.	
CO5	Develop a software application or solution to complex engineering problem using modern tools	

Coordinator

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HOD